DEC - 4 2000

510(k) Summary **Endoscope Contour Detection Device 3DX45** XCF-O140L/13D Colonovideoscope

Submitter's Name, Address, Phone and Fax Numbers A.

Manufacturer of the Subject Devices 1.

Name and address of manufacturer: Olympus Optical Co., Ltd.

2-3-1 Shiniyuku Monolis Nishishiniyuku

Shinjuku-ku, Tokyo, Japan

Registration:

Address, Phone and fax numbers

2951 Ishikawa-Cho,

Of R&D Department,

Hachioji-shi, Tokyo 192-8507

Endoscope Division

Japan

8010047

Telephone (426) 42-5177 Facsimile (426) 46-5613

Name of Contact Person В.

Name:

Laura Storms-Tyler

Address, Phone/fax numbers:

Olympus America Inc.

Director, Regulatory affairs Two Corporate Center Drive Melville, NY 11747-3157 Telephone (631) 844-5688 Facsimile (631) 844-5554

Device Name, Common Name, Classification Name and Predicate Devices C.

Device Name:

Endoscope Contour Detection Device 3DX45

Colonovideoscope XCF-Q140L/13D

Common Name:

Endoscope Contour Detection Device

Colonoscope

Predicate Device:

Model	Name	510(k) number
Image Jet	Spatial Imaging Sensor for Endoscopy	K970782
CF-Q160AL/I	Colonovideoscope	K001241

K002749 Pg2082

D. Description of the Device(s)

The Endoscope Contour Detection Device 3DX45 has been designed for the display of the spatial image of an endoscope. This system consists of the system controller unit, probe, external marker, reference plate, water resistant cap L, water resistant cap S, probe cable, marker cable, LCD cable, ten-key pad, and power cord. Please refer to Instruction Manual.

The probe with the built-in 12 source coils is inserted from the forceps entrance into the endoscope, and the reference plate with built-in three source coils is put on the body of the patient, and the external marker with built-in one source coil is put on the body of the patient. The source coils in the probe, reference plate, and the external marker generates the magnetic fields driven by the alternating current of a different frequency respectively. The sense coils detect the generated magnetic fields as current signals. The detected current signals are converted into the position data of each source coil in the probe, the reference plate and the external marker by calculation. The obtained position data is converted into the shape of the insertion section of the endoscope and is displayed on the monitor. The probe is designed to be used in the biopsy channel of flexible endoscopes having a biopsy channel of ϕ 3.2 mm or larger in diameter The user also has the option of using a dedicated endoscope with built-in coils, so that the XB01-657-6 probe is not required. The XCF-Q140L/I3D colonovideoscope is a variable stiffness colonoscope that has the magnetic coils built into endoscope.

E. Intended Use of the Device

The Endoscope Contour Detection Device 3DX45 and the XCF-Q140L/I3D colonovideoscope have been designed for the detection and display of the spatial image of an endoscope.

F. Summary including Conclusions drawn from Non-clinical tests

When compared to the similar device, the Endoscope Contour Detection Device 3DX45 and the XCF-Q140L/I3D colonovideoscope do not incorporate any significant changes in intended use, method of operation, material or design that could affect the safety of efficacy of this device.





DEC - 4 2000

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Re: K002749

Olympus Endoscope Contour Detection Device 3DX45 and colonoscope, XCF-Q140L/I3D

Dated: August 25, 2000 Received: September 5, 2000

Regulatory Class: II

21 CFR §876.1500/Procode: 78 FDF 21 CFR §892.1600/Procode: 78 JAB

Dear Ms. Storms-Tyler:

Ms. Laura Storms-Tyler

Director, Regulatory Affairs Olympus America, Inc.

Two Corporate Center Drive MELVILLE NY 11747-3157

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4639. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours

Daniel G. Schultz, M.D.

Captain, USPHS

Acting Director, Division of Reproductive, Abdominal, and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure (s)

510(k) Number (if k	(nown): <u>K002749</u>	
Device Name:	Endoscope Contour Detection Device And the associated colonoscope, the >	3DX45 KCF-Q140L/13D
ndications for Use	:	
The Endoscope Co	ntour Detection Device 3DX45 and the XCF-C	Q140L/I3D colonovideoscope
have been designed	I for the detection and display of the spatial im	age of an endoscope.
•		
(Pleas	se do not write below this line. Continue on an	other page is needed.)
	Concurrence of CDRH, Office of Device Eve	aluation (ODE)
Prescription Use (Per 21 CFR 801	OR (1.109)	Over-the-Counter Use
	(Division Sign-Off) Division of Reproductive, Abdo and Radiological Devices	ominal, ENT,
	510(k) Number 27	49